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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/840,210	04/23/2001	Mohammed Khalil	NL000191	3949

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EXAMINER	
LOPEZ, CARLOS N	
ART UNIT	PAPER NUMBER
1731	

DATE MAILED: 01/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/840,210	KHALIL ET AL.	
	Examiner	Art Unit	
	Carlos Lopez	1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 December 2003*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17* is/are pending in the application.

4a) Of the above claim(s) *9-17* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Response to Amendment

The finality of the rejection of the last Office action is withdrawn. The action should have been marked as a non-final rejection.

Election/Restrictions

Applicant's election by original presentation is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Specification

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). The specification does not provide proper antecedent basis for 30 degrees *Celsius*.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1) Claims 1, 7 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Torok (US 3,258,324). Torok teaches molding a glass display face plates, for a glass tube, by using a plunger with a liquid metal core to control the heat distribution of the glass (Fig. 1, col. 3, lines 3 1-42). Torok also teaches that various heat transfer

enhancing or heat transfer reducing elements may be inserted in the plunger to achieve whatever desired temperature distribution (col. 4, lines 1-6). Torok also teaches that the temperature at the flange area (which would press against the claimed inner corners) 21, 22 in Figure 1 has a temperature around 829^{0}F, while the center wall temperature may be around 915^{0}F if the shim is inserted. Thus, Torok teaches a temperature difference between the center and the edge of the plunger of 86^{0}F (-50^{O}C difference). In regards to the limitation of cooling the formed glass such that the inner corners remain at a temperature below the strain point temperature of the glass, it is inherent that the glass, such as when the pressed formed glass plate is being used for a television tube, will be at a point that remains below the strain point temperature of the glass. Hence, it is inherent that a cooling step would occur in order to bring said panel to room temperature which is below a strain point temperature of the glass.
As for claims 7-8, the claimed heat transfer element is deemed as Torok's stainless steel plunger used to press form the glass plate (Col 3, lines 65-66).

2) Claims 1, 3, 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over d'Iribarne et al (US 4,826,522) in view of Littleton et al (US 2,285,596). d'Iribarne discloses a method for making tempered glass sheets with reinforced edge stresses. d'Iribarne press forms glass sheets at a tempering and bending station 2. d'Iribarne's cooling means 10 lowers the temperature of the glass edges in relation to the center (Col. 1, lines 56-61). In regards to the claimed limitation that the glass panel is cooled such that the corners remain at a temperature below the strain point temperature of the glass, the finished glass end product will be at a point that remains below the strain

point temperature and thus a cooling step would be expected. Moreover, the glass plate remains below the strain point temperature of the glass when the glass plate is passed through the cooling station 7.

As for claims 3-4, since cooling means 10 cools the corners of the glass plate, it would be inherent that at the very least that there would be a one-degree temperature difference in relation to the center of the glass plate.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3) Claims 2, 5, 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over d'Iribarne et al (US 4,826,522) as applied to claim 1 above and as evidenced by Littleton et al (US 2,285,596). d'Iribarne discloses a method for making contact tempered glass sheets with reinforced edge stresses. d'Iribarne press forms glass sheets at a tempering and bending station 2. As known in the art and shown by Littleton, tempering of glass is done at a temperature that is lower than the strain point of glass (see claim 4 and Page 1 left column Lines 47-51). In view that d'Iribarne tempers a glass plate while press forming it with plates 3 &4, and as shown by Littleton that tempering of a glass is done at a temperature lower than the strain point of glass, it would have been obvious to a person of ordinary skill in the art, at the time the invention

was made, that d'Iribarne's tempering method of press forming a glass plate would be below the strain point temperature.

In regards to claim 2, since cooling means 10 cools the corners of the glass plate, it would be expected at the very least that there would be a one-degree temperature difference in relation to the center of the glass plate.

In regards to claim 6, since the press forming of the glass is done at a temperature lower than the strain point of the glass, the claimed 30°C below the strain point would be expected.

Response to Arguments

Applicant's arguments filed 12/01/03have been fully considered but they are not persuasive.

Applicant's arguments do not comply with 37 CFR 1.111(c) because they do not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. Further, they do not show how the amendments avoid such references or objections. Applicant has failed to address the issue that the instant claimed cooling step reads on a glass panel that has been manufacture and consequently cooled to thus be used for its intended purpose. The corners would remain at a temperature below the strain point temperature of the glass, such as when the pressed formed glass plate is being used for a television tube its inner corners will be at a point that remains below the strain point temperature of the glass. Hence, it is considered that the formed glass panel

would at some point have a cooling step to bring the glass panel to room temperature, meeting the claimed limitation of "cooling the formed glass panel such that surface temperatures of the inner corners remain below a strain point temperature of the glass."

Applicant also argues that l'Iribarne fails to disclose "A method of manufacturing a display tube by press-forming a glass panel to have inner corners (not edges) and then cooling the formed glass panel such that that the surface temperatures of the inner corners remain below a strain point during cooling." l'Iribarne cools the edges of the glass panel and in doing so it is deemed as also cooling the inner corner of the glass panel or at the very least cooling of the inner corners would occur.

Applicant also argues, "Even if the principles of d'Iribarne et al. were applied to a display tube, the result would be stressed edges but unstressed inner comers. While the edges might be strengthened, residual heat in the thick glass corners would stress-relieve the glass panel, leaving it subject to tensile damage." It is noted d'Iribarne does not disclose thick corner panels wherein the alleged effects pointed out by applicant occurs. In fact the glass panel of d'Iribarne have a constant thickness as shown in figures 3a, 3b, and 3c.

In response to applicant's arguments against the Littleton et al reference individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231

USPQ 375 (Fed. Cir. 1986). The purpose for citing Littleton is to show that tempering of glass as done by d'Iribarne is conventionally done below the strain point temperature of the glass.

In regards to applicant's argument traversing the objection to the specification, it is noted that the specification does not provide proper antecedent basis for the claimed terminology of 30 degrees Celsius below the strain point. Applicant's argues that 30 degrees kelvin below some point is exactly the same as 30 degrees Celsius below that point. Which temperature point is applicant referring to? It is still deemed that 30 degrees kelvin below the strain point is not the same temperature as 30 degrees Celsius below the strain point.

In regards to the objection to claims 3 and 6, said claims on file, as noted in the previous action, contained obvious spelling errors. Applicant's current listing of said claims are being considered as correcting said obvious spelling errors.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlos Lopez whose telephone number is (703) 605-1174. The examiner can normally be reached on Mon.-Fri. 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on (703) 308-1164. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

C.L

PETER CHIN
PRIMARY EXAMINER